AMENDMENTS TO THE CLAIMS

Claims 1-2 (Cancelled)

3. (Currently Amended) ~~The silicon controlled rectifier structure of claim 2 and further comprising~~ A silicon controlled rectifier structure comprising:

a semiconductor region of a first conductivity type;

a semiconductor region of a second conductivity type that contacts the semiconductor region of the first conductivity type;

a first region of the first conductivity type that contacts the semiconductor region of the second conductivity type and is spaced apart from the semiconductor region of the first conductivity type, the first region having a first length;

a second region of the second conductivity type that contacts the semiconductor region of the second conductivity type and is spaced apart from the semiconductor region of the first conductivity type, the second region having a second length and being spaced apart from the first region, the first and second lengths being measured along substantially parallel lines, the first length being substantially longer than the second length;

a first isolation section that contacts the semiconductor region of the second conductivity type and the first region;

a second isolation section that contacts the semiconductor region of the second conductivity type, the first region, and the second region, the first region lying between the first and second isolation sections; and

a third isolation section that contacts the first and second isolation sections and isolates the first region from the second region.

4. (Original) The silicon controlled rectifier structure of claim 3 wherein the second region lies between the first and second isolation sections.

5. (Currently Amended) The silicon controlled rectifier structure of claim 4 and further comprising:

a third region of the first conductivity type that contacts the semiconductor region of the first conductivity type and is spaced apart from the semiconductor region of the second conductivity type, the third region having a third length;

a fourth region of the second conductivity type that contacts the semiconductor region of the first conductivity type and is spaced apart from the semiconductor region of the second conductivity type, the fourth region having a fourth length and being spaced apart from the third region; and

a fourth isolation section that contacts the semiconductor ~~material~~ region of the first conductivity type, the third region, and the fourth region, the fourth isolation section lying between the third and fourth regions.

6. (Original) The silicon controlled rectifier structure of claim 5 wherein the fourth region contacts the first isolation section.

7. (Original) The silicon controlled rectifier structure of claim 6 wherein the fourth length is longer than the first length, substantially longer than the second length, and substantially equal to the third length.

8. (Original) The silicon controlled rectifier structure of claim 7 wherein:

the first and second regions are electrically connected together; and

the third and fourth regions are electrically connected together.

9. (Original) The silicon controlled rectifier structure of claim 5 and further comprising:

a fifth region of the second conductivity type that contacts the semiconductor region of the first conductivity type and the semiconductor region of the second conductivity type, the fifth region having a fifth length, the fourth length and the fifth length being substantially equal.

10. (Original) The silicon controlled rectifier structure of claim 9 and further comprising:

a channel region located between the fourth and fifth regions;

a layer of gate oxide formed over the channel region; and

a gate formed on the layer of gate oxide over the channel region.

11. (Original) The silicon controlled rectifier structure of claim 10 wherein:

the first and second regions are electrically connected together; and

the third and fourth regions are electrically connected together.

Claims 12-15 (Cancelled)

16. (Original) The silicon controlled rectifier structure of claim 5 wherein the first, second and fourth isolation sections are substantially parallel.

17. (Currently Amended) The silicon controlled rectifier structure of claim ~~12~~ 5 wherein a shortest distance between the third region and the second region, and a shortest distance between the first region and the third region are substantially equal.

18. (Previously Presented) A silicon controlled rectifier structure comprising:

a semiconductor region of a first conductivity type;

a semiconductor region of a second conductivity type that contacts the semiconductor region of the first conductivity type;

a first region of the first conductivity type that contacts the semiconductor region of the second conductivity type and is spaced apart from the semiconductor region of the first conductivity type, the first region having a first length;

a second region of the second conductivity type that contacts the semiconductor region of the second conductivity type and is spaced apart from the semiconductor region of the first conductivity type, the second region having a second length and being spaced apart from the first region, the first and second lengths being measured along substantially parallel lines, the first length and the second length being substantially equal;

a first isolation section that contacts the semiconductor region of the second conductivity type and the first region;

a second isolation section that contacts the semiconductor region of the second conductivity type, the first region, and the second region, the first region lying between the first and second isolation sections;

a first layer of metal silicide formed on the first region;

a second layer of metal silicide formed on the second region, the first and second layers of metal silicide being spaced apart;

a layer of isolation material formed on the first and second layers of metal silicide; and

a plurality of contacts formed through the layer of isolation material to be electrically connected to the first and second regions via the first and second layers of metal silicide, respectively, the first layer of metal silicide being connected to ten times or more contacts than the second layer of metal silicide.

19. (Original) The silicon controlled rectifier structure of claim 18 wherein the first layer of metal silicide has a first contiguous area, and the second layer of metal silicide has a second contiguous area that is one-tenth or less the first contiguous area.

20. (Original) The silicon controlled rectifier structure of claim 19 wherein the second region includes a first section with a third contiguous area and heavy dopant concentration, and a second section with a fourth contiguous area and a dopant concentration that is less than the first section and greater than the semiconductor region of the second conductivity type.

21. (Original) The silicon controlled rectifier structure of claim 4 and further comprising a third region of the first conductivity type that contacts the semiconductor region of the first conductivity type and is spaced apart from the semiconductor region of the second conductivity type, the third region having a third length, the first and third lengths being substantially equal, the second length being less that the first and third lengths, the first, second, and third lengths being measured along substantially parallel lines.

22. (Original) The silicon controlled rectifier structure of claim 21 wherein a longitudinal centerline of the first region passes through the second region.

23. (Currently Amended) The silicon controlled rectifier structure of claim [[2]] 30 wherein a longitudinal centerline of the first doped region does not pass through the second doped region.

24. (Original) The silicon controlled rectifier structure of claim 18 and further comprising:

a first metal region formed on the layer of isolation material that is connected to the contacts that are electrically connected to the first region;

a second metal region formed on the layer of isolation material that is connected to the contacts that are electrically connected to the second region; and

a resistor connected to the first and second metal regions.

25. (Original) The silicon controlled rectifier structure of claim 24 and further comprising a capacitor connected to the resistor and the second metal region.

26. (Original) The silicon controlled rectifier structure of claim 25 and further comprising an active circuit connected to the capacitor, the resistor, and the second metal region.

27. (Previously Presented) The silicon controlled rectifier structure of claim 4 wherein the first region has a dopant concentration greater than a dopant concentration of the semiconductor region of the first conductivity type, and the second region has a dopant concentration greater than a dopant concentration of the semiconductor region of the second conductivity type.

Claims 28-29 (Cancelled)

30. (Currently Amended) ~~The silicon controlled rectifier structure of claim 29 and further~~ A silicon controlled rectifier structure comprising:

a first semiconductor region having a first conductivity type;

a second semiconductor region having a second conductivity type, the second semiconductor region contacting the first semiconductor region;

a first doped region of the first conductivity type that contacts the second semiconductor region, the first doped region being spaced apart from the first semiconductor region, and having a first dimension;

a second doped region of the second conductivity type that contacts the second semiconductor region, the second doped region contacting a region of the second semiconductor region that has a lower dopant concentration than a dopant concentration of the second doped region, being spaced apart from the first semiconductor region and the first doped region, and having a second dimension, the first and second dimensions being measured along substantially parallel lines, the first dimension being substantially longer than the second dimension;

an isolation region that contacts the second semiconductor region, the first doped region, and the second doped region, the isolation region lying between the first and second doped regions; and

a third doped region of the first conductivity type that contacts the second semiconductor region and the second doped region, the third doped region being spaced apart from the first semiconductor region and the first region, and having a third dimension measured along substantially parallel lines with the first and second dimensions.

31. (Previously Presented) The silicon controlled rectifier structure of claim 30 wherein the isolation region lies between the first doped region and the third doped region.

32. (Previously Presented) The silicon controlled rectifier structure of claim 30 wherein the third dimension is substantially longer than the second dimension, and shorter than the first dimension.

33. (Previously Presented) The silicon controlled rectifier structure of claim 32 and further comprising a fourth doped region of the second conductivity type that contacts the first doped region, wherein:

the first and fourth doped regions are electrically connected together; and

the second and third doped regions are electrically connected together.

34. (Previously Presented) The silicon controlled rectifier structure of claim 30 wherein a dopant concentration of the third doped region is greater than a dopant concentration of the first doped region.

35. (Currently Amended) ~~The silicon controlled rectifier structure of claim 28 and further~~ A silicon controlled rectifier structure comprising:

a first semiconductor region having a first conductivity type;

a second semiconductor region having a second conductivity type, the second semiconductor region contacting the first semiconductor region;

a first doped region of the first conductivity type that contacts the second semiconductor region, the first doped region being spaced apart from the first semiconductor region, and having a first dimension;

a second doped region of the second conductivity type that contacts the second semiconductor region, the second doped region being spaced apart from the first semiconductor region and the first doped region, and having a second dimension, the first and second dimensions being measured along substantially parallel lines, the first dimension being substantially longer than the second dimension;

an isolation region that contacts the second semiconductor region, the first doped region, and the second doped region, the isolation region lying between the first and second doped regions;

a third doped region of the first conductivity type that contacts the first semiconductor region, the third doped region being spaced apart from the second semiconductor region, the first doped region, and the second doped region, the third doped region having a third dimension measured along substantially parallel lines with the first and second dimensions, the first dimension being substantially longer than the second dimension, and shorter than the third dimension; and

a fourth doped region of the second conductivity type that contacts the first semiconductor region, the fourth doped region being spaced apart from the second semiconductor region, the first doped region, the second doped region, and the third doped region.

36. (Previously Presented) The silicon controlled rectifier structure of claim 35 wherein a dopant concentration of the third doped region is substantially equal to a dopant concentration of the first doped region.

37. (Currently Amended) The silicon controlled rectifier structure of claim 36 wherein:

the first and second doped regions are electrically connected together; and

the third and fourth doped regions are electrically connected together.

38. (Currently Amended) The silicon controlled rectifier structure of claim 35 wherein a shortest distance between the first doped region and the third doped region, and a shortest distance between the second doped region and the third doped region are substantially equal.